Title (en)

METHOD AND APPARATUS FOR REGENERATING A CATALYZED DIESEL PARTICULATE FILTER (DPF) VIA ACTIVE NO2-BASED REGENERATION WITH ENHANCED EFFECTIVE NO2 SUPPLY

Title (de)

VERFAHREN UND VORRICHTUNG ZUR REGENERIERUNG EINES KATALYSIERTEN DIESELRUSSPARTIKELFILTERS (DPF) MITTELS AKTIVER REGENERIERUNG AUF NO2-BASIS MIT VERSTÄRKTER EFFEKTIVER NO2-ZUFUHR

Title (fr)

PROCÉDÉ ET APPAREIL POUR RÉGÉNÉRER UN FILTRE À PARTICULE DIESEL (DPF) CATALYSÉ PAR RÉGÉNÉRATION À BASE DE NO2 ACTIF AVEC ALIMENTATION EN NO2 EFFICACE AMPLIFIÉE

Publication

EP 2252777 A4 20150715 (EN)

Application

EP 09707253 A 20090209

Priority

- US 2009033510 W 20090209
- US 6390008 P 20080207

Abstract (en)

[origin: WO2009100412A1] In a method for regenerating s catalyzed diesel particulate filter (DPF) via active NO2-based regeneration with enhanced effective NO2 supply, a NOx containing gas is introduced into the DPF, and a temperature of at least one of the DPF, the NOx containing gas, and soot in the DPF is controlled while control Sing NOx levels at an inlet of the Df1F so that the NOx containing gas reacts with the catalyst to form N 02 molecules that thereafter react with soot particles to form CO, CO2, and NO molecules and a N02 efficiency is greater than 0.52 gC/gNO2 and so that less than two thirds of the soot mass that is removed from the DPF is oxidized by 02 molecules in the gas to form CO and CO2 molecules.

IPC 8 full level

F01N 3/00 (2006.01); **F01N 3/023** (2006.01); **F01N 3/025** (2006.01); **F01N 3/035** (2006.01); **F02D 41/02** (2006.01); **F02D 41/14** (2006.01)

CPC (source: EP US)

F01N 3/0231 (2013.01 - EP US); **F01N 3/0253** (2013.01 - EP US); **F01N 3/035** (2013.01 - EP US); **F02D 41/029** (2013.01 - EP US); **F02D 41/1462** (2013.01 - EP US); F01N 2610/00 (2013.01 - EP US); F01N 2900/1621 (2013.01 - EP US); F02D 41/1446 (2013.01 - EP US); F02D 2200/0802 (2013.01 - EP US)

Citation (search report)

- [A] JP 2002276443 A 20020925 - ISUZU MOTORS LTD
- See references of WO 2009100412A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2009100412 A1 20090813; AU 2009212195 A1 20090813; AU 2009212195 B2 20130711; AU 2009212196 A1 20090813; AU 2009212196 A8 20110324; AU 2009212196 B2 20130711; CN 101939513 A 20110105; CN 101939513 B 20140903; CN 101939514 A 20110105; CN 101939514 B 20130918; EP 2252777 A1 20101124; EP 2252777 A4 20150715; EP 2252777 B1 20160511; EP 2252778 A1 20101124; JP 2011511897 A 20110414; JP 2011511898 A 20110414; JP 2015200320 A 20151112; JP 6325483 B2 20180516; US 2010326055 A1 20101230; US 2011000190 A1 20110106; US 8844271 B2 20140930; WO 2009100413 A1 20090813

DOCDB simple family (application)

US 2009033510 W 20090209; AU 2009212195 A 20090209; AU 2009212196 A 20090209; CN 200980104375 A 20090209; CN 200980104381 A 20090209; EP 09707253 A 20090209; EP 09708894 A 20090209; JP 2010546085 A 20090209; JP 2010546086 A 20090209; JP 2015093463 A 20150430; US 2009033512 W 20090209; US 86432809 A 20090209; US 86433009 A 20090209